

WHAT IS CLAIMED IS:

1. An image formation system which is composed of
a color image formation apparatus and a monochrome
image formation apparatus connected to a network,
5 comprising:

judgment means for judging if it is a color page
or a black/white page for each page in a job where the
color page coexists with the black/white page outputted
from a computer connected to the network;

10 separation means for forming the color page by the
color image formation apparatus and forming the
black/white page by the monochrome image formation
apparatus in accordance with the judgment result in
said judgment means; and

15 mixing means for mixing each of sheets, on which
images are separately formed by the color image
formation apparatus and the monochrome image formation
apparatus, in accordance with the judgment result in
said judgment means so as to assort each of the sheets
20 in predetermined order of the job.

2. A system according to Claim 1, wherein the
same data is transferred to each of the color image
formation apparatus and the monochrome image formation
25 apparatus from the computer for one job.

3. A system according to Claim 1, wherein said

~~separation means performs a page separation by forming~~
an image of the color page, judged by said judgment
means in the color image formation apparatus, and
transferring page number information to the monochrome
5 image formation apparatus, as to a page judged as the
black/white page.

4. A system according to Claim 1, wherein said
separation means performs a page separation by forming
10 an image of the black/white page, judged by said
judgment means in the monochrome image formation
apparatus, and transferring the page number information
to the color image formation apparatus, as to a page
judged as the color page.

15 5. A system according to Claim 1, wherein said
mixing means performs a mixing operation by setting a
sheaf of sheets, on which images are formed by the
color image formation apparatus, in an inserter
20 attached to the monochrome image formation apparatus by
an user and feeding the color pages from the inserter
at a predetermined timing of an image formation
operation for one job performed by the monochrome image
formation apparatus.

25 6. A system according to Claim 1, wherein said
~~mixing means performs a mixing operation by setting a~~

~~sheaf of sheets, on which images are formed by the~~
monochrome image formation apparatus, in an inserter
attached to the color image formation apparatus by an
user and feeding the black/white pages from the
5 inserter at a predetermined timing of an image
formation operation for one job performed by the color
image formation apparatus.

7. A system according to Claim 1, wherein any
10 mode can be selected from plural operation modes in the
computer so as to differentiate the data transference
method to each image formation apparatus every each
operation mode from the computer.

15 8. A system according to Claim 7, wherein if the
operation mode selected by the computer is a first
mode, the same data is transferred to each of the color
image formation apparatus and the monochrome image
formation apparatus, and if it is a second mode, data
20 transferred to the color image formation apparatus is
differentiated from data transferred to the monochrome
image formation apparatus.

25 9. A system according to Claim 8, wherein in the
case of the first mode, data including the color pages
coexisted with the black/white pages is transferred to
each of the color image formation apparatus and the

~~monochrome image formation apparatus, and in the case~~
of the second mode, color page data is transferred to
the color image formation apparatus and black/white
page data is transferred to the monochrome image
5 formation apparatus.

10 10. A control method for an image formation
system which is composed of a color image formation
apparatus and a monochrome image formation apparatus
connected to a network, said method comprising:

a first step of judging if it is a color page or a
black/white page for each page in a job where the color
page coexists with the black/white page;

15 a second step of forming an image of the color
page in the job on a sheet by the color image formation
apparatus on the basis of the judgment result in said
first step;

20 a third step of forming an image of the
black/white page in the job on the sheet by the
monochrome image formation apparatus on the basis of
the judgment result in said first step;

25 a fourth step of controlling an image formation
timing of the monochrome image formation apparatus and
a feed timing of the sheet on which an image is formed
by the color image formation apparatus; and

a fifth step of conveying and discharging the
sheet, on which the image is formed by the color image

~~formation apparatus, and the sheet, on which the image~~
is formed by the monochrome image formation apparatus,
in page order of the job.

5 11. A control method for an image formation
system which is composed of a color image formation
apparatus and a monochrome image formation apparatus
connected to a network, said method comprising:

10 a first step of judging if it is a color page or a
black/white page for each page in a job where the color
page coexists with the black/white page;

15 a second step of forming an image of the
black/white page in the job on a sheet by the
monochrome image formation apparatus on the basis of
the judgment result in said first step;

 a third step of forming an image of the color page
in the job on a sheet by the color image formation
apparatus on the basis of the judgment result in said
first step;

20 a fourth step of controlling an image formation
timing of the color image formation apparatus and a
feed timing of the sheet on which an image is formed by
the monochrome image formation apparatus; and

25 a fifth step of conveying and discharging the
sheet, on which the image is formed by the color image
formation apparatus, and the sheet, on which the image
is formed by the monochrome image formation apparatus,

~~in page order of the job.~~

12. A control method of an image formation system which is composed of a color image formation apparatus and a monochrome image formation apparatus connected to a network, said method comprising:

a first step of judging if it is a color page or a black/white page for each page in a job where the color page coexists with the black/white page;

10 a second step of forming an image of the color page in the job on a sheet by the color image formation apparatus on the basis of the judgment result in said first step;

15 a third step of forming an image of the black/white page in the job on the sheet by the monochrome image formation apparatus on the basis of the judgment result in said first step;

20 a fourth step of controlling a feed timing of the sheet on which an image is formed by the color image formation apparatus and a feed timing of the sheet on which an image is formed by the monochrome image formation apparatus on the basis of the judgment result in said first step; and

25 a fifth step of conveying and discharging the sheet, on which the image is formed by the color image formation apparatus, and the sheet, on which the image is formed by the monochrome image formation apparatus,

13. A control method of an image formation system which is composed of a color image formation apparatus and a monochrome image formation apparatus connected to a network, said method comprising:

a second step of forming an image of the color page by the color image formation apparatus and an image of the black/white page by the monochrome image formation apparatus in accordance with the judgment result in said first step; and

14. A method according to Claim 13, wherein the same data is transferred to each of the color image formation apparatus and the monochrome image formation apparatus from the computer ~~for one job.~~

15. A method according to Claim 13, wherein a
page separation is performed in said second step by
forming an image of the color page, judged in said
first step in the color image formation apparatus, and
5 transferring page number information to the monochrome
image formation apparatus, as to a page judged as the
black/white page.

16. A method according to Claim 13, wherein a
10 page separation is performed in said second step by
forming an image of the black/white page, judged in
said first step in the monochrome image formation
apparatus, and transferring the page number information
to the color image formation apparatus, as to a page
15 judged as the color page.

17. A method according to Claim 13, wherein a
mixing operation is performed in said third step by
setting a sheaf of sheets, on which images are formed
20 by the color image formation apparatus, in an inserter
attached to the monochrome image formation apparatus by
an user and feeding the color pages from the inserter
at a predetermined timing of an image formation
operation for one job performed by the monochrome image
25 formation apparatus.

18. A method according to Claim 13, wherein a

~~mixing operation is performed in said third step by~~

setting a sheaf of sheets, on which images are formed by the monochrome image formation apparatus, in an inserter attached to the color image formation apparatus by an user and feeding the black/white pages from the inserter at a predetermined timing of an image formation operation for one job performed by the color image formation apparatus.

10 19. A method according to Claim 13, wherein any mode can be selected from plural operation modes in the computer so as to differentiate a data transference method from the to each image formation apparatus every each operation mode from the computer.

15 20. A method according to Claim 19, wherein if the operation mode selected by the computer is a first mode, the same data is transferred to each of the color image formation apparatus and the monochrome image formation apparatus, and if it is a second mode, data transference to the color image formation apparatus is differentiated from data transferred to the monochrome image formation apparatus.

25 21. A method according to Claim 20, wherein in the case of the first mode, data including the color pages coexisted with the black/white pages is

~~transferred to each of the color image formation~~
apparatus and the monochrome image formation apparatus,
and in the case of the second mode, color page data is
transferred to the color image formation apparatus and
black/white page data is transferred to the monochrome
image formation apparatus.

22. A computer-readable storage medium which
stores a program to execute a control method for an
image formation system composed of a color image
formation apparatus and a monochrome image formation
apparatus connected to a network, said method
comprising:

a first step of judging if it is a color page or a
black/white page for each page in a job where the color
page coexists with the black/white page;

a second step of forming an image of the color
page in the job on a sheet by the color image formation
apparatus on the basis of the judgment result in said
first step;

a third step of forming an image of the
black/white page in the job on the sheet by the
monochrome image formation apparatus on the basis of
the judgment result in said first step;

a fourth step of controlling an image formation
timing of the monochrome image formation apparatus and
a feed timing of the sheet on which an image is formed

by the color image formation apparatus; and

5 a fifth step of conveying and discharging the sheet, on which the image is formed by the color image formation apparatus, and the sheet, on which the image is formed by the monochrome image formation apparatus, in page order of the job.

23. A computer-readable storage medium which stores a program to execute a control method for an
10 image formation system composed of a color image formation apparatus and a monochrome image formation apparatus connected to a network, said method comprising:

15 a first step of judging if it is a color page or a black/white page for each page in a job where the color page coexists with the black/white page;

20 a second step of forming an image of the black/white page in the job on a sheet by the monochrome image formation apparatus on the basis of the judgment result in said first step;

a third step of forming an image of the color page in the job on a sheet by the color image formation apparatus on the basis of the judgment result in said first step;

25 a fourth step of controlling an image formation timing of the color image formation apparatus and a feed timing of the sheet on which an image is formed by

the monochrome image formation apparatus; and

5 a fifth step of conveying and discharging the sheet, on which the image is formed by the color image formation apparatus, and the sheet, on which the image is formed by the monochrome image formation apparatus, in page order of the job.

24. A computer-readable storage medium which stores a program to execute a control method for an
10 image formation system composed of a color image formation apparatus and a monochrome image formation apparatus connected to a network, said method comprising:

15 a first step of judging if it is a color page or a black/white page for each page in a job where the color page coexists with the black/white page;

20 a second step of forming an image of the color page in the job on a sheet by the color image formation apparatus on the basis of the judgment result in said first step;

a third step of forming an image of the black/white page in the job on the sheet by the monochrome image formation apparatus on the basis of the judgment result in said first step;

25 a fourth step of controlling a feed timing of the sheet on which an image is formed by the color image formation apparatus and a feed timing of the sheet on

5 a fifth step of conveying and discharging the sheet, on which the image is formed by the color image formation apparatus, and the sheet, on which the image is formed by the monochrome image formation apparatus, in page order of the job.

a first step of judging if it is a color page or a black/white page for each page in a job where the color page coexists with the black/white page outputted from a computer connected to the network;

25 a third step of mixing each of sheets, on which
images are separately formed by the color image
formation apparatus and the monochrome image formation

apparatus, in accordance with the judgment result in said first step so as to assort each of the sheets in predetermined order of job.

5 26. A medium according to Claim 25, wherein the same data is transferred to each of the color image formation apparatus and the monochrome image formation apparatus from the computer for one job.

10 27. A medium according to Claim 25, wherein a page separation is performed in said second step by forming an image of the color page, judged in said first step in the color image formation apparatus, and transferring page number information to the monochrome
15 image formation apparatus, as to a page judged as the black/white page.

20 28. A medium according to Claim 25, wherein a page separation is performed in said second step by forming an image of the black/white page, judged in said first step in the monochrome image formation apparatus, and transferring the page number information to the color image formation apparatus, as to a page
25 judged as the color page.

29. A medium according to Claim 25, wherein a mixing operation is performed in said third step by

setting a sheaf of sheets, on which images are formed
by the color image formation apparatus, in an inserter
attached to the monochrome image formation apparatus by
an user and feeding the color pages from the inserter
5 at a predetermined timing of an image formation
operation for one job performed by the monochrome image
formation apparatus.

30. A medium according to Claim 25, wherein a
10 mixing operation is performed in said third step by
setting a sheaf of sheets, on which images are formed
by the monochrome image formation apparatus, in an
inserter attached to the color image formation
apparatus by an user and feeding the black/white pages
15 from the inserter at a predetermined timing of an image
formation operation for one job performed by the color
image formation apparatus.

31. A medium according to Claim 25, wherein any
20 mode can be selected from plural operation modes in the
computer so as to differentiate a data transference
method to each image formation apparatus every each
operation mode from the computer.

25 32. A medium according to Claim 31, wherein if
the operation mode selected by the computer is a first
mode, the same data is transferred to each of the color

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